

## IN THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently amended) Agents A pharmaceutical preparation comprising an agent for [[the]] inhibition of [[the]] assembly and [[the]] maturation of virus structure proteins, characterised in that they contain comprising, as an active ingredients ingredient, at least one inhibitor of cellular chaperones, or a chemical chaperone, in a pharmaceutical preparation.
2. (Currently amended) Agents Pharmaceutical preparation according to claim 1, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] comprise substances are used which hinder, regulate, or otherwise influence [[the]] folding and proteolytical maturation of virus proteins and through this hinder [[the]] release and [[the]] replication of viruses[[,]] especially of pathogens infectious diseases such as AIDS, hepatitis, hemorrhagic fever, SARS, smallpox, measles, polio, herpes virus infections or the flu (influenza).
3. (Currently amended) Agents Pharmaceutical preparation according to claim 1 or 2, characterised in that as wherein the inhibitors of cellular chaperones, or

chemical chaperones[[],] comprise substances are used which especially influence the enzymatic activities of molecular folding enzymes in [[the]] a host cell.

4. (Currently amended) Agents Pharmaceutical preparation according to claim 3, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[],] comprise substances are used which are absorbed by cells of higher eucaryotes and after cell absorption block [[the]] protein convolution of virus structure proteins.

5. (Currently amended) Agents Pharmaceutical preparation according to claim 1 [[to 4]] or 2, characterised in that the pharmaceutical preparation next to inhibitors of cellular chaperones, or chemical chaperones, also contains other effective substances, especially chemotherapeutics, which are known for their further comprising at least one chemotherapeutic substance having anti-viral effects effect.

6. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as inhibitors of cellular chaperones, or chemical chaperones substances, are used which are administered in various

forms wherein the pharmaceutical preparation is in form for administration in vivo orally, intravenously, intramuscularly, ~~subcutaneous~~ subcutaneously or in encapsulated form with or without cell type specificity determining changes, based on the use of a specific application- and/or doses-regime, [[show]] shows a low zytotoxicity, trigger triggers no or irrelevant side effects, and [[show]] shows a relatively high metabolic half-life[[,]] and a relatively low clearance-rate in [[the]] an organism to which it is administered.

7. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] comprise substances are used which

- a) are isolated in their natural form micro-organisms or other natural sources,
- b) arise through chemical modifications of natural substances, or
- c) are produced totally synthetic synthetically, or
- d) are synthesised *in vivo* through gentherapeutical methods.

8. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones comprise substances, are used which disturb [[the]] highly organised organized processes of [[the]] assembly and of

the proteolytical maturation of virus structure proteins and through this prevent the release and production of ~~descendent~~ descendant viruses.

9. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones comprise substances ~~are used~~ which regulate, disturb or block the folding of viral proteins.

10. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] comprise substances ~~are used~~ which disturb the later processes of virus replication such as comprising assembly, budding, proteolytical maturation and virus release.

11. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] comprise substances ~~are used~~ which disturb the proteolytic maturation of precursor proteins of [[the]] viral polyproteins.

12. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,] comprise substances are used which block the activity of viral proteases.

13. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[,:] comprise substances are used which disturb [[the]] activities of cellular proteases that are involved in [[the]] virus maturation.

14. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[,:] comprise substances are used which exhibit a wide spectrum of efficacy and are therefore used as innovative broadband virostatica for [[the]] prophylaxis and/or for [[the]] therapy of various virus infections.

15. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of

cellular chaperones, or chemical chaperones[[,]] comprise substances ~~are used~~ which ~~block~~ hinder activities of cellular chaperones such as heat shock proteins (hsp).

16. (Currently amended) Agents Pharmaceutical preparation according to claim [[15]] 13, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] comprise substances ~~are used~~ which hinder the activities of the heat shock proteins Hsp40, Hsp70, 90, Hso27 and Hsc70.

17. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones[[,]] or chemical chaperones[[,]] comprise substances ~~are used~~ which belong to the following substance classes and their derivates: Geldanamycin, Deoxyspergualin, 4-PBA or Herbimycin A.

18. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the chemical chaperones comprise substances ~~are used~~ which regulate, disturb or block [[the]] protein conformation and [[the]] folding of viral proteins.

19. (Currently amended) Agents Pharmaceutical preparation according to claim 18, characterised in that as wherein the chemical chaperones substances such as comprise Glycerol, Trimethylamins Trimethylamines, Betain, Trehalose or deuterised deuterized water (D<sub>2</sub>O) are used.

20. (Currently amended) Agents Pharmaceutical preparation according to claims claim 18 and 19, characterised in that as wherein the chemical chaperones comprise substances are used which are suited for the treatment, therapy and inhibition of infections with various human pathogenic and even or animal pathogenic viruses.

21. (Currently amended) Agents Pharmaceutical preparation according to claims claim 1 [[to 4]] or 2, characterised in that as wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] comprise substances are used which are suited for the treatment, therapy and inhibition of infections with causative pathogens of chronically infectious diseases such as comprising AIDS (HIV-1 and HIV-2), [[from]] hepatitis (HCV and HBV), from the causative pathogens of the “Severe Acute Respiratory Symptoms” (SARS), [[from]] SARS-CoV (Corona virus), [[from]] smallpox viruses, from the causative pathogens of viral hemorrhagic fever (VHF) such as the Ebola-virus as a

~~representative of the family of Filoviridae, of flu-inducing pathogens such as the Influenza-A-virus or influenza.~~

22. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 1 to 21 for the Method for inhibition of [[the]] assembly and [[the]] maturation of virus structure proteins in an organism, comprising administering a pharmaceutical preparation of claim 1 to the organism.~~

23. (Currently amended) ~~Use of inhibitors according to claim 22 Method for [[the]] inhibition of the entry/internalisation entry/internalization process, [[the]] replication, and [[the]] maturation and release of *Flaviviridae* in an organism, comprising administering a pharmaceutical preparation of claim 1 to the organism.~~

24. (Currently amended) ~~Use of inhibitors according to claims 22 and 23 Method for [[the]] inhibition of the later processes in the life cycle of *Flaviviridae* after maturation and release thereof in an organism, comprising administering a pharmaceutical preparation of claim 1 to the organism.~~

25. (Currently amended) [[Use]] Method according to claims claim 22 to 24, characterised in that wherein the inhibitors of cellular chaperones, or chemical chaperones, ~~widely or totally trough~~ at least substantially, through blockage, prevent [[the]] production of infectious virions of *Flaviviridae*-infected cells.

26. (Currently amended) [[Use]] Method according to claim 22, characterised in that wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] cause [[the]] inhibition of [[the]] release of virions as well as ~~the almost~~ substantially complete reduction of [[the]] infectivity of ~~the~~ released virions.

27. (Currently amended) [[Use]] Method according to claim 22, characterised in that wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] repress [[the]] virus reproduction and through this a new infection of [[the]] host cells and therefore [[the]] spread of an infection *in vivo*, ~~in the case of the~~ infection being hepatitis-C-virus in [[the]] liver tissue of an infected person.

28. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones,~~ Method according to claims claim 22 to 25 for [[the]] inhibition of [[the]] reproduction of *Flaviviridae* according to the mechanisms, wherein the inhibitors of cellular chaperones, or chemical chaperones effect

- a) blockage/reduction of [[the]] release of new virions,
- b) blockage/reduction of [[the]] infectivity of released virions,
- c) blockage/reduction of [[the]] infection expansion in [[the]] cultures of [[the]]  
a host cell, or
- d) blockage/reduction of [[the]] infection expansion in infected organs *in vivo*.

29. (Currently amended) ~~Use of inhibitors of cellular chaperones or of chemical chaperones Method according to claims claim 22 to 28 for the repression of Flavivirus-infections and Pestivirus-infections in humans and animals, wherein the organism is a human or animal infected with a Flavivirus or a Pestivirus and the pharmaceutical preparation represses said infection.~~

30. (Currently amended) ~~Use of inhibitors of cellular chaperones or of chemical chaperones Method according to claims claim 22 to 27 for the induction of the cell death of , wherein the organism is a human or animal having Hepato-carcinoma cells and the pharmaceutical preparation induces death of said cells.~~

31. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, Method according to claims claim 22 to 30 for the~~

~~repression and/or prevention of the wherein the organism is a human or an animal and the pharmaceutical preparation represses and/or prevents development of liver cell carcinomas in the human or the animal.~~

32. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims Method according to claim 30 [[and]] or 31 for the therapy of patients with, wherein the human or the animal has established liver cell carcinomas.~~

33. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 30 to 32 for the treatment/combat/prevention of Method for treating or preventing in a human being~~

~~[[33.1]] HCV-induced liver cirrhosis, and/or or~~  
~~[[33.2]] HCV-induced liver cell carcinomas, or~~  
~~[[33.3]] medicine-induced liver carcinomas, or~~  
~~[[33.4]] genetically conditioned liver carcinomas, or~~  
~~[[33.5]] through the environment induced liver carcinomas, and/or or~~  
~~[[33.6]] through a combination of viral and non-viral factors induced liver carcinomas,~~

comprising administering to the human a pharmaceutical preparation according to claim 1.

34. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 30 to 33 Method for the aimed elimination of liver carcinoma cells in a human which develop as the result of an~~

~~[[30.1]] HCV-infection, or~~

~~[[34.2]] corresponding co-infection of HCV and HBV, or~~

~~[[34.3]] HDV/HBV/HCV co-infection, or~~

~~[[34.4]] HIV/HCV co-infection, or~~

~~[[34.5]] HCV and a co-infection with other viruses, bacteria or parasites,~~

comprising administering to the human a pharmaceutical preparation according to claim 1.

35. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, Method according to claims claim 28 and 29 for the regeneration of patients after a Flavivirus- infection, wherein the organism is a human who has been infected with a Flavivirus.~~

36. (Currently amended) Use of inhibitors of cellular chaperones, or of chemical chaperones, Method according to claims claim 29 to 35 for the regeneration of, wherein the organism is a farm animals after a Flavivirus – or Pestivirus – infection animal which has been infected with a Falvivirus or a Pestivirus.

37. (Currently amended) Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 30 to 34 Method for [[the]] reduction of [[the]] number of infected virus-producing cells in [[the]] liver cell tissue of a human or an animal, comprising administering a pharmaceutical preparation of claim 1 to the human or the animal.

38. (Currently amended) Use according to claims 23 to 25, 28, 29 as well as 35 and 36, characterised in that Method for prophylactic treatment of a human who may be exposed to a Flavivirus, comprising administering a pharmaceutical preparation of claim 1 to the human, wherein the inhibitors of cellular chaperones, or chemical chaperones[[,]] change [[the]] post-translational modification and proteolytic processing of [[the]] *Flaviviridae* structure proteins as well as reduce [[the]] dimerization of [[the]] virus-envelope-proteins and through this reduce or block [[the]] release and infectivity of *Flaviviridae*.

39. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 22 to Method according to claim 38 for the inhibition of both the preservation and persistence of an , wherein infection of the human or the animal with the virus is already established and the pharmaceutical preparation inhibits the infection, as well as for a secondary infection, and therefore for [[the]] spread of [[an]] infection, including the the inhibiting comprising blockage of [[the]] expansion of a Flaviviridae-infection in vivo.~~

40. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 22 to 39 in combination with on another for the Method for treatment and combat of HCV caused hepatitis, Flavivirus caused fever, haemorrhages and encephalitis as well as and Pestivirus caused illnesses in a human, comprising administering a pharmaceutical preparation of claim 1 to the human.~~

41. (Currently amended) ~~[[Use]] Method according to claims claim 39 and 40 in combination with therapeutics already used in the , wherein the human is infected with a Flavivirus and the method further comprises administering to the~~

human at least one other anti-viral therapy of pharmaceutical for Flaviviridae-infections.

42. (Currently amended) [[Use]] Method according to ~~claims~~ claim 40 [[and]]  
~~or 41 for the treatment of , wherein the human has~~ co-infections of various  
Flaviviruses and Pestiviruses and the administration of the pharmaceutical  
preparation treats the co-infections.

43. (Currently amended) ~~Use according to claims 34 and 37~~ Method for [[the]]  
treatment of humans having co-infections of HCV and immune deficiency  
viruses HIV-1 and HIV-2, comprising administering a pharmaceutical  
preparation of claim 1 to the human.

44. (Currently amended) ~~Use according to claim 43~~ Method for [[the]]  
treatment of HCV/HIV-co-infections in ~~combination with the~~ a human,  
comprising administering to the human HAART-therapy and a pharmaceutical  
preparation of claim 1.

45. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of~~  
~~chemical chaperones, according to claim 37~~ Method for [[the]] prevention of a

re-infection with HCV during liver and other organ transplantations in a human patient, comprising administering a pharmaceutical preparation of claim 1 to the human patent.

46. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claim 45 for the Method for prevention of a re-infection with HCV during cell therapies through the giving the agents before, during and after the of a liver or other organ transplantation in a human patient, comprising administering a pharmaceutical preparation of claim 1 to the client before, during and after the transplantation.~~

47. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones; Method according to claims claim 45 [[and]] or 46 for the prevention of a re-infection with HCV during [[a]] the transplantation of the organ, wherein the organ is [[of]] virus-free organs into and the patient is a chronic virus carriers carrier which always have a residual virus burden that can lead to the reinfection of new organs as well as during the transfer of or the organ is virus-infected organs of donors into and the patient is virus-free patients.~~

48. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, Method according to claims claim 38 and 39 for the prophylaxis of a *Flaviviridae*-infection in persons with a high risk of a new infection such as , wherein the human comprises doctors and other health workers, risk-personnel in houses with a high visitor rate residents of residences frequently visited by many other people, drug addicts, travellers in highly endemic regions for [[the]] *Flaviviridae*, persons in health care or for and relatives of chronic virus carriers.~~

49. (Canceled)

50. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 22, 30 and 34 Method for the inhibition of both the maintenance and persistence of an already established infection as well as a secondary infection and therefore the spread of the infection in an organism, including the blockage of the expansion of an HBC-infection *in vivo*, comprising administering a pharmaceutical preparation of claim 1 to the organism.~~

51. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 27, 37, 40, 49 and 50 in combination with one another Method for [[the]] treatment and combat of hepatitis in a human, comprising administering a pharmaceutical preparation of claim 1 to the human.~~

52. (Currently amended) ~~Use Method according to claim 51 in combination with therapeutics already used in the, further comprising also administering to the human another pharmaceutical for anti-viral therapy of Hepadna-viruses.~~

53. (Currently amended) ~~Use according to claim 37 and 50 for the Method for treatment of a co-infection with HBV and immune deficiency viruses HIV-1 and HIV-2 in a human, comprising administering a pharmaceutical preparation of claim 1 to the patient.~~

54. (Currently amended) ~~Use according to claim 53 for the Method for treatment of HBV/HIV- co-infections in combination with the a human, comprising administering to the human a pharmaceutical preparation of claim 1 and HAART-therapy.~~

55. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 22 and 49 for the production of agents and/or pharmaceutical preparations~~ Method for the inhibition of the release, maturation and replication of hepatitis viruses in a human, comprising administering a pharmaceutical preparation of claim 1 to the human.

56. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claim 55 for the production of medicaments~~ Method for the treatment and prophylaxis of hepatitis in a human, comprising administering a pharmaceutical preparation of claim 1 to the human.

57. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claim 22 in pharmaceutical preparations~~ Method for the treatment of infections due to hepatitis and or retro viruses in a human, comprising administering a pharmaceutical preparation of claim 1 to the human.

58. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claim 22~~ Method for the inhibition of the release, maturation and replication of retro viruses as well as hepatitis viruses in

a human, comprising administering to the human a pharmaceutical preparation of claim 1.

59. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claim 58~~ Method for the inhibition of the late stages of the replication cycle of retro viruses as well as and hepatitis viruses in a human, comprising administering to the human a pharmaceutical preparation of claim 1.

60. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claim 22, characterised in that the~~ Method for hindering assembly and the release of virions from the cell's surface is hindered surfaces of cells in an organism, comprising administering a pharmaceutical preparation of claim 1 to the organism.

61. (Currently amended) ~~Use of inhibitors of cellular chaperones, or of chemical chaperones, according to claims 22 and 57 to 59, characterised in that in the case of~~ Method of hindering, in retroviruses in an organism, retroviruses the proteolytic processing of [[the]] structural Gag proteins through viral

protease are hindered comprising administering a pharmaceutical preparation of claim 1 to the organism.

62. (Currently amended) ~~Use of inhibitors according to claim 22, characterised in that the Method of inhibiting in an organism release, maturation and replication of~~

- a) Spuma-viruses, or
- b) Mammalian C-Type Onco-viruses, or
- c) BLV (Bovine Leukemia Virus), or
- d) HTLV (Human T-Cell Leukemia Virus), or
- e) Leukaemia viruses, or
- f) RSV (Rous Sarcoma Virus) viruses, or
- g) Lenti-viruses.

is hindered: comprising administering a pharmaceutical preparation of claim 1 to the organism.

63. (Currently amended) ~~Use according to claim 64, characterised in that Method according to claim 62, wherein the release, maturation and replication of~~

- a) HTLV-I or

b) HTVL-II

is hindered.

64. (Currently amended) Use according to claim 62g, characterised in that

Method according to claim 62, wherein the viruses of which the release,  
maturity and replication [[of]] is hindered are Lenti viruses which are

- a) Humans Immune Deficiency Virus Type 1 (HIV-1), or
- b) Humans Immune Deficiency Virus Type 2 (HIV-2), or
- c) Apes Immune Deficiency Virus (SIV), or
- d) Cats Immune Deficiency Virus (FIV), or
- e) Cattle Immune Deficiency Virus (BIV)

is hindered.

65. (Canceled)

66. (Currently amended) Use according to claim 62g) for the combat / Method  
for treatment of AIDS in a human, comprising administering a pharmaceutical  
preparation of claim 1 to the human.

67. (Currently amended) [[Use]] Method according to claim 66 in combination with

67.1 other anti-retroviral medicaments;

67.2 Blockers of the reverse transcription and/or of the viral protease;

67.3 anti-retroviral therapies based on gentherapeutical interventions;

67.4 intracellular immunisation;

67.5 the introduction of anti-HIV-1/HIV-2 effective genes into stem cells and/or peripheral CD4+ lymphocytes, further comprising administering to the human at least one other anti-retroviral agent, blocker of reverse transcriptive and/or of protease of the virus, anti-viral therapy based on gentherapeutical intervention, intracellular immunization or introduction of anti-HIV-1/HIV-2 effective genes into stem cells and /or peripheral CD4+ lymphocytes.

68. (Currently amended) Use according to claim 66 for the therapy/ Method

for treatment of AIDS in an advanced state of disease in a human, comprising administering a pharmaceutical preparation of claim 1 to the human.

69. (Currently amended) Use according to claim 66 Method for the prevention of an illness outbreak of HIV-1/HIV-2 infection in humans and for [[the]] reduction of [[the]] spread of the infection in the organism (reduction of the

~~"viral load") of symptom-free HIV-1/HIV-2 seropositive and HIV-1/HIV-2 infected persons~~ humans, comprising administering a pharmaceutical preparation of claim 1 to the humans.

70. (Currently amended) ~~Use according to claim 66 Method for [[the]] treatment/ therapy/ treatment and prevention of HIV-induced dementia dementia in a human[[,]] especially for the by prevention of [[the]] HIV-infection of neurons, Glia-, and Endothel-cells in the capillaries of the brain of the human, comprising administering a pharmaceutical preparation of claim 1 to the human.~~

71. (Currently amended) ~~Use according to claim 66 Method for [[the]] prevention of [[the]] establishment of a systematic systemic HIV-1/ HIV-2-infection in a human directly after coming the human has come in contact with infectious HIV-1/HIV-2 viruses, for example due to pinprick injuries with HIV-contaminated blood or blood products comprising administering a pharmaceutical preparation of claim 1 to the human.~~

72. (New) Pharmaceutical preparation according to claim 2, wherein the viruses said release and replication of which is hindered by said inhibitors of cellular chaperones or chemical chaperones comprise viruses for AIDS,

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hepatitis, hemorrhagic fever, SARS, smallpox, measles, polio, herpes or influenza.

73. (New) Pharmaceutical preparation according to claim 15, wherein the substances which block cellular chaperones comprise heat shock proteins.